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Solar Water Systems Benefit the Working Poor Three Different Ways: A Case Study of Consuelo Foundation's Self-Help Housing Initiative in Waianae, Oahu

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Consuelo Foundation: History and Community-Building Approach

Consuelo Zobel Alger was born into one of the Philippines' wealthiest families, the Zobel de Ayala family. In 1988, just two years prior to Consuelo's death in her adopted home of Hawaii, the Consuelo Zobel Alger Foundation was incorporated as a nonprofit, private operating foundation. Consuelo Foundation envisions communities in Hawaii and the Philippines in which disadvantaged children, women and families achieve dignity, self-esteem and self-sufficiency resulting in renewed hope for those who have lost it and hope to those who have never had it. The Foundation's mission is to operate or support programs in Hawaii and the Philippines that improve the quality of life of disadvantaged children, women and families. Jeffrey N. Watanabe chairs the Foundation's six-member board, while Patti J. Lyons is the founding President and Chief Executive Officer.

Using a small professional staff with offices in Manila and Waianae and headquarters in Honolulu's Chinatown, the Foundation works to fulfill Consuelo's vision. In Hawaii, the Foundation currently pursues three broad programmatic goals:

1. To strengthen children and families through community development and asset building;
2. To reduce the incidence of child abuse and neglect by strengthening parent-infant bonding among families at risk; and
3. To improve women's status and opportunities.

Roughly three-fourths of our activities occur in the Philippines and one-fourth in Hawaii. In some cases we directly run our own programs; in others, we contract with other organizations to manage activities that help fulfill our mission. A very small number of grants is also made. Since Consuelo Foundation's resources are modest in comparison to its programmatic goals, we focus on a limited number of program strategies and projects within these broad goals. A report on the Foundation's activities is published annually and is available on request.

Before she died in 1990, Consuelo made it clear that she wanted her Foundation to pay particular attention to native Hawaiians, though not to the exclusion of work with people of other ethnicities. Our staff leadership – who had a long history of social work on the Leeward Coast -- began to survey the needs of Hawaiians. We found that affordable housing and safe neighborhoods were major concerns. Children live in families, and families live in communities. Without strengthening those communities, we would be unable to help children and their families forge better futures. Therefore, we decided to make community development our central approach in Hawaii.

Our community development approach is comprehensive rather than piecemeal, preventive rather than palliative, and long-term rather than short-term. We also take an assets approach rather than a deficit approach to community building. In other words, we look for what is right in families and communities and seek to deepen that, rather than looking for what is wrong and seeking to treat that. We also believe that communities everywhere contain the talent and potential to solve their own problems if they adhere to common values and if they receive the kind of support they need to strengthen their capacity to work together. Our work, therefore, is in essence the building of capacities: in individuals, in families, and in communities.

Self-Help Housing Project in Waianae

By far the largest Consuelo Foundation project in Hawaii, **Ke Aka Ho‘onā** is a values-driven community in Waianae, Oahu built since 1993 through self-help construction. The Foundation's goal is not simply to increase the supply of affordable housing, but to build an intentional community of low-income working families with children who wish to live in a nurturing neighborhood free from violence and substance abuse. Each year, between 8 and 17 families build their homes together in one group, without knowing which home would be theirs until the end of construction. Volunteers and professional construction staff are kept to a minimum. This approach gives families more pride in ownership, more skills to do their own home repair, and more cohesion as a group of future neighbors. Families secure a mortgage of less than \$60,000 for the home, while agreeing to buy their fee within 30 years of moving in.

As of this date, 63 single-family homes have been completed. Currently, 12 duplex homes are being built by 12 low-income families. By May 2001, 75 families will have completed their homes. The Foundation's staff based at the neighborhood's Community Center manage the recruitment and selection of homebuilders, help families through the building process, and offer a range of activities for families. These include outings for children and their parents, a small-grants program to assist children and adults in furthering their education, computer classes, and a 14-week family-strengthening program run by the Coalition for a Drug-Free Hawaii. A similar project for another 32 families will begin next year elsewhere in Waianae on Hawaiian Homestead land.

House Design and Construction Method

Both the duplex units and the single-family homes have three bedrooms, two baths, and a carport; internal living area is 1,127 and 1,104 square feet, respectively. Designed by architects at Group 70, both home models are of high quality yet can be built by inexperienced self-help builders over a period of nine to ten months' worth of weekends, under the supervision of our general contractor, Trim Line Contractors. The double-wall, post-on-pier homes have stepped wooden landing entries in both the front and the rear of the house. At the rear is a laundry area located on a concrete slab and enclosed by sliding wooden doors. The laundry area contains a laundry tray, solar water heater storage tank with timer, and all necessary hookups for a washer and dryer.

All eight increments at Ke Aka Ho‘onā have roof-mounted solar water heating units, with ground-mounted solar water heater storage tank with timer. Since 1998, these units have been built to Hawaiian Electric Company (HECO) standards necessary for the provision of a \$1,000 to \$1,500 rebate.

Consuelo Foundation believes strongly in making the home construction a true self-help process as much as possible. Virtually the only tasks handled by professional subcontractors rather than the builders are: installing carpets, plumbing systems, and wiring for electricity, telephone, and cable TV; and pouring concrete for driveways and carports. Each family must provide two builders to work from 7 am to 5:30 pm every Saturday and Sunday until the homes are completed. No one knows in advance which house and lot will be theirs. Instead, all homes are built together by all the builders. Only when all homes are completed does the Foundation hold a lottery to determine who gets which house. Each builder agrees in the sales

contract to accept whichever house is drawn for their family. The Foundation has found that this process builds unity among the future neighbors and ensures uniformly high quality of house construction.

Home Financing

The families selected to build these homes have incomes between 40 and 80 percent of the area median income. In other words, these are the working poor, who have worked hard to stay off welfare but who barely make enough money to get ahead. They are construction workers, janitors, part-time teachers, secretaries, bus drivers, and nurses' aides. Some were homeless and jobless at previous points in their lives, but all families now have low but steady incomes. Most importantly, they have a desire to have a home of their own in a safe, drug-free, violence-free neighborhood in which neighbors give back to each other.

To keep the house sales price low for these families, Consuelo Foundation pays the entire cost of the general contractors' and subs' labor and of reimbursable expenditures. Reimbursables include such items as ladders, chipping guns, saws, and the cost of hauling away refuse and surface material. We also enroll families in the HomeStart Individual Development Account (IDA) program of the Federal Home Loan Bank of Seattle, through American Savings Account. Each family in this program starts a modest savings account during the construction period. At the end of construction, every dollar saved by the family is matched 3-for-1 by the HomeStart program, and the total amount goes to reduce closing costs and the mortgage principal. Families can save a maximum of \$1,667 to generate a \$5,000 match, which means that \$6,667 goes toward paying off the principal and mortgage. The result is far lower monthly P&I repayment rates.

Consuelo Foundation provides its own interim home construction financing. Permanent home financing is provided through American Savings Bank. The special program we have arranged with American Savings Bank requires no down payment other than the builders' sweat equity, no points, and no private mortgage insurance. Minimal closing costs are rolled into the 25-year fixed rate mortgage. The loan is set not on the appraised value of the home (which would be too high for our builders to qualify for) but on the cost of materials used to build the home. Therefore, home sales prices are below \$60,000 for homes that could sell for twice that price.

Three Ways Families Reap Financial Benefits from their Solar Systems

1. Income Tax Credit. Ever since our first homes were completed in 1994 and each year since then, Ke Aka Ho'onā's annual group of new homebuilders has benefited from the Hawaii Energy Conservation Income Tax Credit. Consuelo Foundation pays the tax preparation fee for these families for the first year that they reside at Ke Aka Ho'onā so they can fully avail of the tax benefits of home ownership. For most families, this results in a much-needed income tax refund that they use to improve their homes, save for their children's education, and provide for their families' other needs.

2. Solar Energy. In 1998, the families of Increment Five at Ke Aka Ho'onā learned about HECO's special solar energy credit program. They alerted the Foundation to this opportunity. Ever since then, we have made sure that our solar water systems meet all HECO standards. Thanks to the rebates from HECO, we are able to reduce the purchase price for each new home (initially by \$1,500 and now by \$1,000) because we pass the entire rebate on to the homeowners. We are extremely grateful to Hawaiian Electric for their flexibility and for their support of our low-income homebuilders.

3. Lower Electricity Bills. Waianae is arguably one of the sunniest spots on the island of Oahu. As a result, our solar systems do virtually all the work in heating water for the households at Ke Aka Ho'onā. The resultant savings on electricity bills is dramatic. For examples, all 17 families of our most recent increment, who moved into their new homes in May 2000, reported last week that their electricity bills are significantly lower than was the case in the homes and apartments where they used to live. One resident

told me that his family's bill dropped from \$200 per month to \$70 per month. For families that need to stretch every dollar to meet their monthly household needs, this savings has tremendous meaning.

In conclusion, it is my hope that Hawaiian Electric Company and the State of Hawaii continue to implement policies and programs that maximize the incentives for families to use alternative energy sources for their household energy needs.